

# Adherence to oral anticoagulants for treatment of atrial fibrillation in the Middle East: a systematic review

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*Citation for published version (Harvard):*

Medani, AR, Cox, A & Jalal, Z 2019, *Adherence to oral anticoagulants for treatment of atrial fibrillation in the Middle East: a systematic review*. PROSPERO.

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## Adherence to oral anticoagulants for treatment of atrial fibrillation in the Middle East: a systematic review

*Abdel Rahman Medani, Anthony Cox, Zahraa Jalal*

### Citation

Abdel Rahman Medani, Anthony Cox, Zahraa Jalal. Adherence to oral anticoagulants for treatment of atrial fibrillation in the Middle East: a systematic review. PROSPERO 2019 CRD42019124610 Available from: [https://www.crd.york.ac.uk/prospERO/display\\_record.php?ID=CRD42019124610](https://www.crd.york.ac.uk/prospERO/display_record.php?ID=CRD42019124610)

### Review question

To assess the atrial fibrillation patients' adherence to oral anticoagulants in the Middle East.

### Searches

Published articles in peer-reviewed journals were searched systematically. The purpose of this organized search was to obtain published research articles about oral anticoagulants and adherence of patients with AF. The search also looked at how the adherence was measured. Several databases were used in the search including PubMed, PubMed Central UK, Embase, ScienceDirect, and Google Scholars. The period of time which was covered with the search was from 01/01/2009 to 31/12/2018. Selection of these dates is justified by the first authorisation of Dabigatran, which was the first NOAC to be used.

### Types of study to be included

Publications in the journals which included articles that studied adherence to oral anticoagulants in AF population. The designs of the selected studies are: analytical cross-sectional, descriptive cross-sectional, retrospective cohort studies, and prospective cohort studies.

### Condition or domain being studied

Atrial fibrillation AF is the major type of arrhythmia that affects the human heart. It affects about 1% of the world population. The disease is a risk factor for stroke which can be a disabling condition and can cause death. The numbers of individuals affected by the condition is increasing around the world. By 2050 the total number of patients who suffer (AF) is expected to be about 16 million in the United States alone. These figures are candidate for further escalation in the forthcoming future.

### Participants/population

The study population in selected studies is patients who are diagnosed with atrial fibrillation (AF) and who are prescribed oral anticoagulants for prevention of stroke. The selected publications also include published data about adult patients, residents in the Middle East, receiving their treatment in the Middle East, and publications are English language. Data from registries from other parts of the world which included patients from the Middle East were not included. Also publications about other type of anticoagulants (e.g. parental), and publications not in English are excluded.

### Intervention(s), exposure(s)

The interventions of the selected studies are: assessing adherence of patients to prescribed oral anticoagulants, identifying reasons for non-adherence to oral anticoagulants, testing knowledge about oral anticoagulants, and assessing perception about oral anticoagulants.

### Comparator(s)/control

Not applicable.

### Context

### Main outcome(s)

Adherence to prescribed oral anticoagulants will be most important. Factors associated with adherence such levels of knowledge, and patients' beliefs about their oral anticoagulants will be investigated.

### Timing and effect measures

These factors will be assessed on using validated questionnaires and scales specified for assessing these factors.

### Additional outcome(s)

Types of prescribed oral anticoagulants, other factors that may appear, prescribing patterns, obstacles and limitations

### Timing and effect measures

Frequencies and percentages of prescribed oral anticoagulant will be calculated.

### Data extraction (selection and coding)

Abstracts and titles of the articles were screened to select the publications. Relevant studies were nominated through the following process: studies about patients who use oral anticoagulants, studies describing adherence to oral anticoagulants, interventions to improve adherence to oral anticoagulants, studies evaluating knowledge and perception, also adherence to prescribing guidelines. Selection of studies was in English language.

### Risk of bias (quality) assessment

The Joanna Briggs tool for cross-sectional studies <http://joannabriggs.org/research/critical-appraisal-tools.html> will be used. This will be undertaken by the main researcher (me) and reviewed by a second (supervisor). If any discrepancies arise then a third researcher will be consulted.

### Strategy for data synthesis

Aggregate data will be used and a narrative-descriptive synthesis is planned. We do not anticipate a meta-analysis to be possible. There are three researchers involved in this work, the main researcher (me) will conduct and identify initial screening of titles and abstracts, derive full text articles, conduct data extraction and synthesise and analyse the data. The other researcher will check the process of data extraction through out and any discrepancies will be resolved by a third researcher. Tabulated extracted data will include, country of the study, type of the study, studied oral anticoagulant(s), number of patients/subjects included in the study, tools that used for measuring the adherence, and results/outcomes of the study.

### Analysis of subgroups or subsets

No. of parameters will be calculated, for examples total number of patients, proportions of each oral anticoagulant, measuring adherence methods, proportion of patient used in each methods, frequencies of co-morbidities associated.

### Contact details for further information

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### Organisational affiliation of the review

University of Birmingham

### Review team members and their organisational affiliations

Mr Abdel Rahman Medani. University of Birmingham  
Dr Anthony Cox. University of Birmingham  
Dr Zahraa Jalal. University of Birmingham

### Type and method of review

Systematic review

### Anticipated or actual start date

15 November 2018

### Anticipated completion date

30 June 2019

## Funding sources/sponsors

None

## Conflicts of interest

None known

## Language

English

## Country

England

## Stage of review

Review Ongoing

## Subject index terms status

Subject indexing assigned by CRD

## Subject index terms

Anticoagulants; Atrial Fibrillation; Humans; Middle East

## Date of registration in PROSPERO

24 April 2019

## Date of publication of this version

21 May 2019

## Revision note for this version

addedd my main supervisor (Dr.Zahraa Jalal) as an author

## Details of any existing review of the same topic by the same authors

## Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	Yes
Risk of bias (quality) assessment	Yes	Yes
Data analysis	Yes	No

## Revision note

addedd my main supervisor (Dr.Zahraa Jalal) as an author

## Versions

24 April 2019

21 May 2019

## PROSPERO

This information has been provided by the named contact for this review. CRD has accepted this information in good

faith and registered the review in PROSPERO. The registrant confirms that the information supplied for this submission is accurate and complete. CRD bears no responsibility or liability for the content of this registration record, any associated files or external websites.